

application are shown below, in clean form, for clarity. Please enter these claims as amended. Also attached is a version with markings to show changes made to the claims.

1. (Three Times Amended) A semiconductor device having an improved bond pad, the semiconductor device comprising:
  - a. a bond pad electrically connected to an active circuit in the semiconductor device;
  - b. a substantially flat bonding surface on the bond pad; and
  - c. an opening extending partially into the bonding surface.
2. A semiconductor device according to claim 1, further comprising a plurality of openings in the bonding surface of the bond pad.
3. A semiconductor device according to claim 2, wherein the openings are disposed about a center portion of the bonding surface of the bond pad so the center portion of the bonding surface is free of openings.  
*B1C1*
4. (Previously Amended) A semiconductor device according to claim 2, wherein the openings comprise a pattern of radiating channels disposed about a center of the bonding surface.
5. A semiconductor device according to claim 2, wherein the openings comprise a series of spaced apart rectangular channels arranged parallel to one another.
6. A semiconductor device according to claim 2, wherein the openings comprise an array of L shaped channels disposed about a center of the bonding surface.
7. A semiconductor device according to claim 2, wherein the openings comprise an array of holes disposed about the bonding surface.

8. (Twice Amended) A semiconductor device, which comprises:

- a. an active circuit in the semiconductor device;
- b. a wiring pattern overlying and in electrical contact with the active circuit;
- c. bond pads formed as select areas on the wiring pattern; and
- d. a plurality of openings extending partially into a substantially flat bonding surface of the bond pads.

9. A semiconductor device according to claim 8, wherein the openings are disposed about a center portion of the bonding surface of the bond pad so that the center portion of the bonding surface is free of openings.

10. A semiconductor device according to claim 8, wherein the openings comprise a pattern of radiating channels disposed about a center of the bonding surface.

11. A semiconductor device according to claim 8, wherein the openings comprise a series of spaced apart rectangular channels arranged parallel to one another.

12. A semiconductor device according to claim 8, wherein the openings comprise an array of L shaped channels disposed about a center of the bonding surface.

13. A semiconductor device according to claim 8, wherein the openings comprise an array of holes disposed about the bonding surface.

14. A semiconductor device according to claim 8, further comprising a passivation layer overlying the wiring pattern, the passivation layer having holes therethrough to expose the bonding surface of the bond pads to enable electrical connection to the bond pads through the holes.

15. A semiconductor device according to claim 8, further comprising bond wires bonded to the bonding surface of the bond pads.

16. (Three Times Amended) A semiconductor device, comprising:

- a. a layer of insulating material;
- b. a substantially flat layer of conductive material over lying the layer of insulating material;
- c. bond pads formed as select areas on a surface of the layer of conductive material; and
- d. at least one opening extending partially into the bond pads.

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*conf*

17. (Three Times Amended) An improved bond pad comprising:  
a metal layer having a substantially planar surface, said metal layer electrically connected to an active circuit of a semiconductor device and having at least one opening extending partially into said metal layer.

18. (Amended) An improved bond pad according to claim 17, further comprising a plurality of openings extending partially into [in] the metal layer of the bond pad.

19. An improved bond pad according to claim 18, wherein the openings are disposed about a center portion of the planar surface of the bond pad so that the center portion of the planar surface is free of openings.

20. An improved bond pad according to claim 18, wherein the openings comprise a pattern of radiating channels disposed about a center of the bond pad.

21. An improved bond pad according to claim 18, wherein the openings comprise a series of spaced apart rectangular channels arranged parallel to one another.

22. An improved bond pad according to claim 18, wherein the openings comprise an array of L shaped channels disposed about a center of the bond pad.

23. An improved bond pad according to claim 18, wherein the openings comprise an array of holes disposed about the bond pad.

24. An improved bond pad according to claim 18, further comprising a passivation layer overlying the metal layer, the passivation layer having holes therethrough to expose the planar surface of the bond pad to enable electrical connection to the bond pad.

25. An improved bond pad according to claim 18, further comprising a bond wire bonded to the planar surface of the bond pad.

26. An improved bond pad according to claim 18, wherein said metal layer is aluminum.

27. (Three Times Amended) A semiconductor device having an improved bond pad, the semiconductor device comprising:

a bond pad electrically connected to an active circuit of the semiconductor device, said bond pad having a substantially planar surface; and

at least one opening extending partially into said bond pad.

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28. (Three Times Amended) A semiconductor device having an improved bond pad, the bond pad having a metal layer, said metal layer having a substantially planar surface connected to an active circuit of a semiconductor device further having at least one opening extending [therethrough] partially into the metal layer, the semiconductor device made according to the method comprising:

forming an insulating layer over active circuitry of a semiconductor chip;  
etching said insulating layer thereby forming clear contact paths to said active circuitry of the semiconductor chip;  
forming a metal layer over said insulating layer; and  
etching said metal layer thereby forming an interconnect wiring pattern and bond pads having at least one opening extending partially into said bond pads.

29. (Previously Amended) A semiconductor device according to claim 28 further comprising:

forming a passivation layer over the metal layer; and  
etching said passivation layer to expose select areas of the wiring pattern and bond pads.

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30. (New Claim) A semiconductor device having an improved bond pad, the bond pad having a metal layer, said metal layer having a substantially planar surface connected to an active circuit of a semiconductor device further having at least one opening extending [therethrough] partially into the metal layer, the semiconductor device made according to the method comprising:

forming an insulating layer over active circuitry of a semiconductor chip;  
etching said insulating layer thereby forming clear contact paths to said active circuitry of the semiconductor chip;  
forming a metal layer over said insulating layer; and  
etching said metal layer thereby forming at least one opening extending partially into said bond pad.